

WHAT IS CLAIMED IS:

1. An air conditioner device, comprising:  
a housing;  
a first electrode, disposed in said housing;  
a second electrode, removably disposed in said housing; and  
means, connected with said second electrode, for frictionally cleaning said first electrode when said second electrode is manually removed from said housing.
2. The device of claim 1, wherein said means for frictionally cleaning includes a length of flexible insulating material.
3. The device of claim 2, wherein said length of flexible insulating material is sufficiently long to span the distance between said first electrode and said second electrode when said second electrode is at least partially in said housing.
4. The device of claim 3, wherein said length of insulating material includes a first end, associated with said second electrode, and a second end that frictionally cleans said first electrode.
5. The device of claim 4, wherein said second end defines a slit within which said first electrode fits when said second electrode is disposed at least partially in said housing.
6. The device of claim 2, wherein said length of flexible insulating material comprises a strip or a sheet of flexible insulating material.
7. The device of claim 1, wherein said means for frictionally cleaning includes a length of material.
8. An air conditioner device, comprising:  
a housing;  
an emitter electrode, disposed in said housing;  
a collector electrode, removably disposed in said housing; and

means associated with said collector electrode for frictionally cleaning said emitter electrode when said collector electrode is manually removed from said housing and when said collector electrode is returned to said housing.

9. The device of claim 8, wherein said means for frictionally cleaning includes a length of flexible insulating material having a first end connected with said collector electrode and a second end that extends toward said emitter electrode.

10. The device of claim 9, wherein said length of flexible insulating material comprises a strip or a sheet of flexible insulating material.

11. The device of claim 10, wherein said length of flexible insulating material scrapes against at least a portion of said emitter electrode when said collector electrode is removed from and returned to said housing.

12. The device of claim 8, wherein said means for frictionally cleaning includes a length of flexible insulating material that moves when said collector electrode moves, and wherein said length of flexible insulating material scrapes against at least a portion of said emitter electrode when said collector is moved.

13. The device of claim 12, wherein said length of flexible insulating material comprises a strip or a sheet of flexible insulating material.

14. An air conditioner device, comprising:  
a housing;  
an emitter electrode, disposed in said housing;  
a collector electrode, movably disposed in said housing; and  
means associated with said collector electrode for frictionally cleaning said emitter electrode when said collector electrode is moved relative to said housing.

15. The device of claim 14, wherein said means for frictionally cleaning includes a length of flexible insulating material.

16. The device of claim 14, wherein said means for frictionally cleaning includes a length of material.

17. The device of claim 16, wherein said length of material is sufficiently long to span the distance between said emitter electrode and said collector electrode.

18. An air conditioner device, comprising:

a housing;

a first electrode, disposed in said housing such that said first electrode is stationary within said housing;

a second electrode, removably disposed in said housing such that said second electrode can be manually removed from said housing and then returned to a resting position in said housing; and

a high voltage generator disposed in said housing, to provide a potential difference between said first electrode and said second electrode when said second electrode is in the resting position in said housing;

wherein said stationary first electrode is frictionally cleaned when said second electrode is manually removed from said housing.

19. The device of claim 18, including:

a flexible length of insulating material associated with said second electrode that scrapes against at least a portion of said first electrode, to thereby frictionally clean said first electrode, when said second electrode is manually removed from said housing.

20. The device of claim 19, wherein said length of flexible insulating material is sufficiently long to span the distance between said first electrode and said second electrode.

21. The device of claim 19, wherein said stationary first electrode is also frictionally cleaned when said second electrode is manually returned to said housing.

22. The device of claim 19, wherein said length of flexible insulating material comprises a strip or a sheet of flexible insulating material.

23. The device of claim 18, including:  
a flexible strip of insulating material associated with said second electrode that scrapes against at least a portion of said first electrode, to thereby frictionally clean said first electrode, when said second electrode is manually removed from said housing and when said second electrode is returned to said housing.
24. The device of claim 23, wherein said flexible strip of insulating material is sufficiently long to span the distance between said first electrode and said second electrode.
25. The device of claim 18, including:  
a flexible length of insulating material associated with said second electrode and biased to project toward said first electrode; and  
a vane projecting from an interior region of said housing such that said vane contacts said length and urges said length away from said first electrode when said second electrode is in the resting position in said housing.
26. The device of claim 25, wherein said length disengages from contact with said vane, and scrapes against at least a portion of said first electrode, soon after said second electrode is lifted from the resting position, while being removed from said housing.
27. The device of claim 25, wherein said length of flexible insulating material comprises a strip or a sheet of flexible insulating material.
28. An air conditioner device, comprising:  
a housing;  
an emitter electrode, disposed in said housing such that said emitter electrode is stationary within said housing;  
a collector electrode, removably disposed in said housing such that said collector electrode can be manually removed from said housing and then returned to a resting position in said housing;

a high voltage generator disposed in said housing, to provide a potential difference between said emitter electrode and said collector electrode when said collector electrode is in the resting position in said housing;

a member connected to said collector electrode; and

a flexible length extending from said member toward said emitter electrode;

wherein flexible length scrapes against at least a portion of said emitter electrode as said collector is manually removed from and returned to said housing, to thereby clean said emitter electrode.

29. The device of claim 28, further comprising a handle to assist a user in manually removing and returning said collector electrode.

30. The device of claim 29, further comprising a vane projecting from an interior region of said housing such that said vane contacts said length and urges said length upward and away from said emitter electrode when said collector electrode is in the resting position in said housing.

31. The device of claim 30, wherein said length disengages from contact with said vane, and scrapes against at least a portion of said emitter electrode, soon after said collector electrode is lifted from the resting position, in the process of being removed from said housing.

32. An air conditioner device, comprising:

a housing;

an emitter electrode, disposed in said housing such that said emitter electrode is stationary within said housing;

a collector electrode, movably disposed in said housing such that said collector electrode can be moved from and then returned to a resting position in said housing;

a high voltage generator disposed in said housing, to provide a high voltage potential to said collector electrode when said collector electrode is in the resting position;

a member connected to said collector electrode; and

a flexible length extending from said member toward said emitter electrode;

wherein flexible length scrapes against at least a portion of said emitter electrode as said collector is moved relative to said housing, to thereby clean said emitter electrode.

33. An air conditioner device, comprising:
- an upstanding, elongated housing;
  - an ion generating unit positioned in said housing, including:
    - an emitter electrode;
    - a movable collector electrode, elongated along the direction of elongation of said housing; and
    - a user-liftable handle secured to said movable collector electrode, said handle accessible through an opening in a top portion of said housing, to assist a user with lifting said collector electrode from a resting position within said housing; and
  - a cleaning member associated with said collector electrode, wherein said cleaning member frictionally cleans said emitter electrode when said collector is lifted using said handle.
34. An air conditioner device, comprising:
- a housing;
  - a first electrode, disposed in said housing;
  - a second electrode, removably disposed in said housing; and
  - a cleaning member connected with said collector electrode, wherein said cleaning member frictionally cleans said emitter electrode when said collector is removed from said housing.
35. An air conditioner device, comprising:
- a housing;
  - a first electrode, disposed in said housing;
  - a second electrode, removably disposed in said housing; and
  - a flexible length of material, connected with said second electrode, for frictionally cleaning said first electrode when said second electrode is removed from said housing.

36. The device of claim 35, wherein said flexible length of material comprises a flexible strip or a sheet.

37. An air conditioner device, comprising:

- a housing;

- a first electrode, disposed in said housing such that said first electrode is stationary within said housing;

- a second electrode, removably disposed in said housing such that said second electrode can be manually removed from said housing and then returned to a resting position in said housing; and

- a high voltage generator disposed in said housing, to provide a high voltage potential to said second electrode when said second electrode is in the resting position in said housing;

- wherein said stationary first electrode is frictionally cleaned when said second electrode is moved relative to said housing.

38. An air conditioner device, comprising:

- a housing;

- an emitter electrode, disposed in said housing such that said emitter electrode is stationary within said housing;

- a collector electrode, removably disposed in said housing such that said collector electrode can be manually removed from said housing and then returned to a resting position in said housing;

- a high voltage generator disposed in said housing, to provide a high voltage potential to said collector electrode when said collector electrode is in the resting position in said housing;

- a member connected with said collector electrode; and

- wherein said member scrapes against at least a portion of said emitter electrode as said collector is moved relative to said housing, to thereby clean said emitter electrode.